

(19) World Intellectual Property
Organization
International Bureau



H1967-PCT

(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/013429 A1

(51) International Patent Classification⁷: **H01R 12/22**,
13/24

(21) International Application Number:
PCT/US2004/023877

(22) International Filing Date: 23 July 2004 (23.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/627,516 25 July 2003 (25.07.2003) US

(71) Applicant (for all designated States except US): **ADVANCED MICRO DEVICES, INC.** [US/US]; One AMD Place Mail Stop 68, P.O. Box 3453, Sunnyvale, CA 94088-3453 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HUSSAIN, Rafiq** [US/US]; 43667 Skye Road, Fremont, CA 94539 (US). **CYMERYS, Jeffrey** [US/US]; 866 Sandcastle Drive, Corona Del Mar, CA 92625 (US).

(74) Agent: **COLLOPY, Daniel, R.**; One AMD Place, Mail Stop 68, P.O. Box 3453, Sunnyvale, CA 94088-3453 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

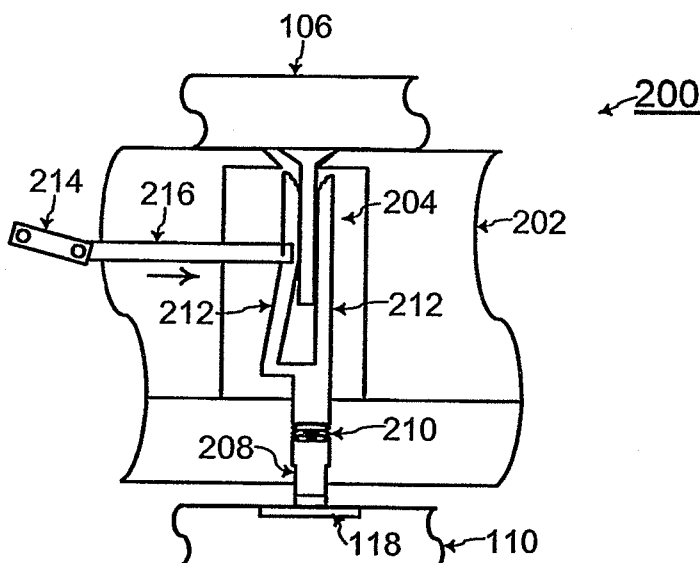
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPRESSION MOUNT AND ZERO INSERTION FORCE SOCKET FOR IC DEVICES



(57) Abstract: In a socket system and method for coupling a pin (114) of an IC (integrated circuit) device (106) to a contact pad (118) of a circuit board (110), a zif opening (204) on a socket (202, 302) asserts substantially zero force as the pin of the IC device is inserted therein. In addition, a compression mount lead (208, 304) on the socket presses against the contact pad of the circuit board. Once inside the zif opening, the pin is coupled to the compression mount lead via forking leads (212) that press against the pin. Thus, substantially zero force is applied on the body of the IC device. Furthermore, top portions of the forking leads contact a top portion of the pin toward the IC device to minimize an electrical path length.